

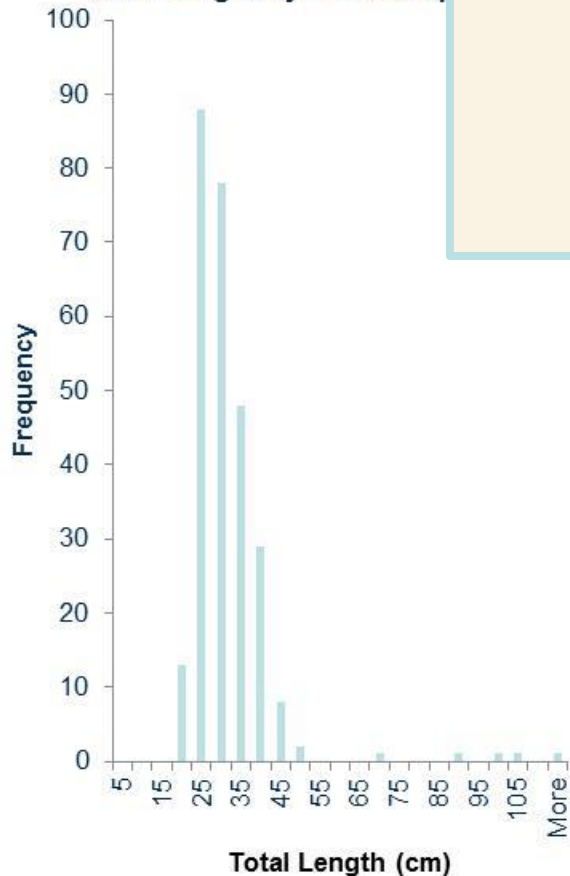
# Introduction - Fishery Monitoring and Data Management

Christofer Boggs - Chief, Fisheries Research and  
Monitoring Division

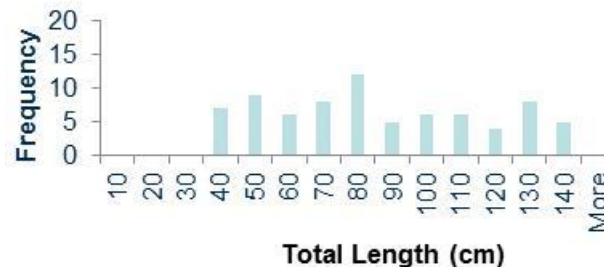
External Review of Fisheries Stock Assessments

May 19-22, 2014

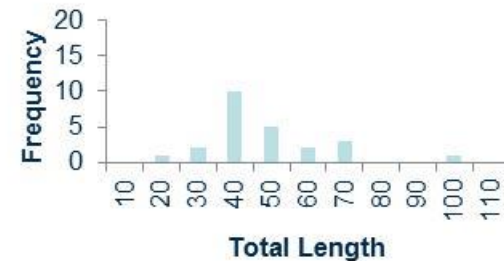
**CNMI Biosampling Jan 2011 to  
Mar 2, 2014. N = 271 *C. undulatus*,  
99% caught by snorkle spear**



**Guam Biosampling Dec 2009 to  
Dec 10, 2013. N = 76 *C. undulatus*,  
91% caught by scuba spear**



**A. Samoa Biosampling Nov  
2011 to Mar 1, 2014. N = 24  
*C. undulatus*, 88% caught by  
spearing**



# Data for Assessment

- Highly Migratory Species
  - Tunas, Billfish, Sharks



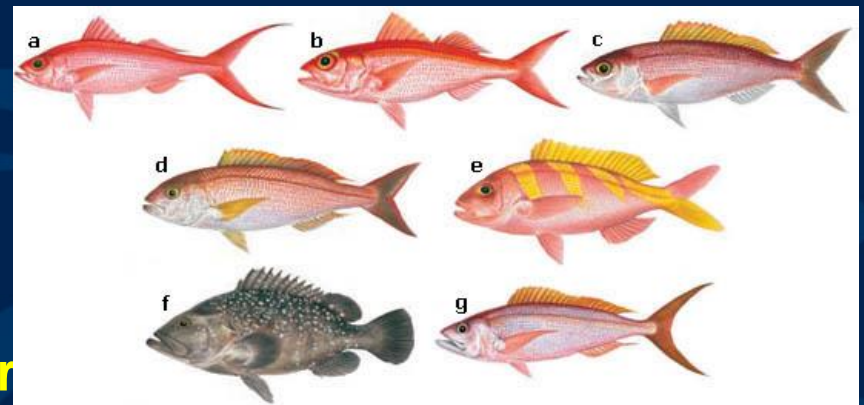
## Insular Species

### — Bottomfish

- Snappers, groupers,
- Deep 7 focus

### — Coral Reef Fish

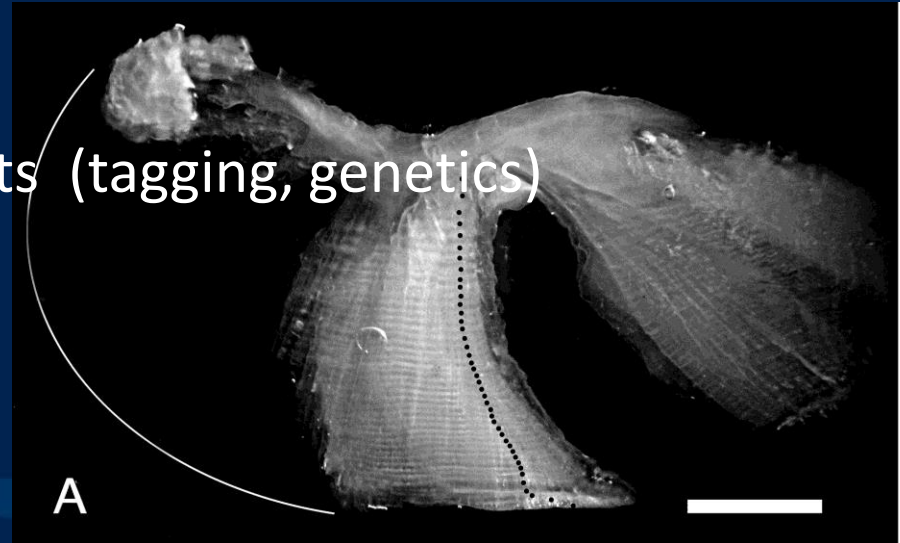
- 100's of species (Data Poor)



# Data Needed for a Good Assessment

- **Life history information**

- Stock structure and movements (tagging, genetics)
- Growth
- Maturity and reproduction
- Natural mortality

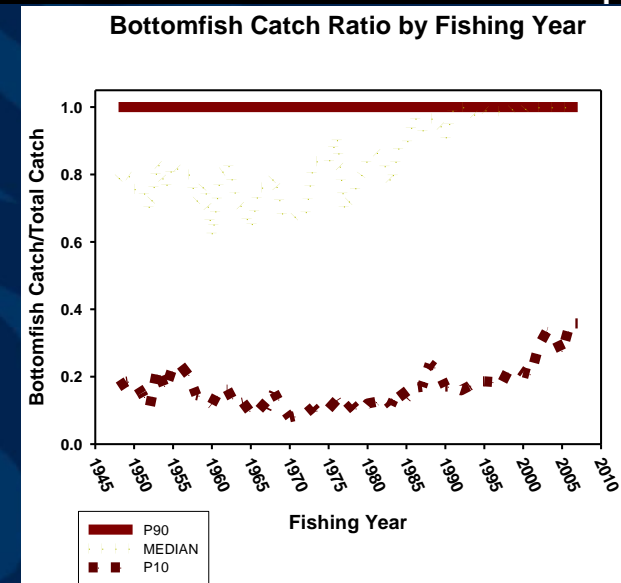


- **Fishery-dependent data**

- Catch data (commercial and recreational)
- Abundance index from catch-and-effort (logbooks, observers, creel surveys)
- Size information sampled from the catch

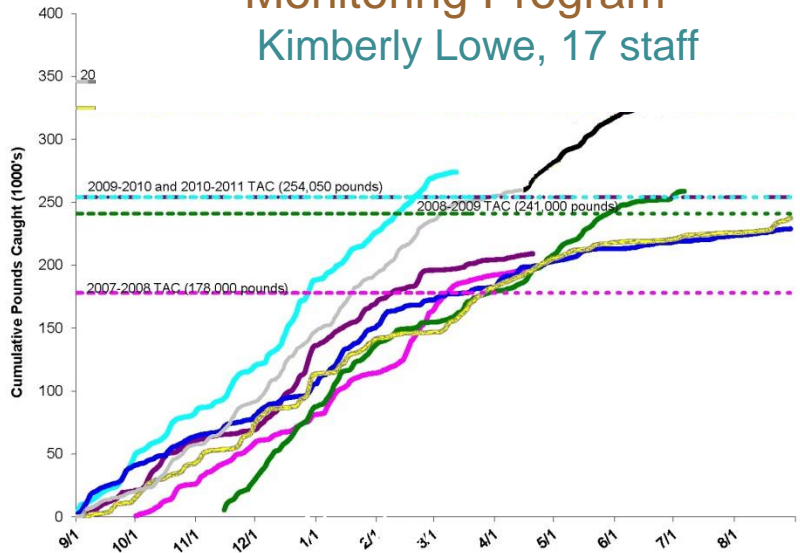
- **Fishery-independent data**

- Abundance index and size data from research surveys



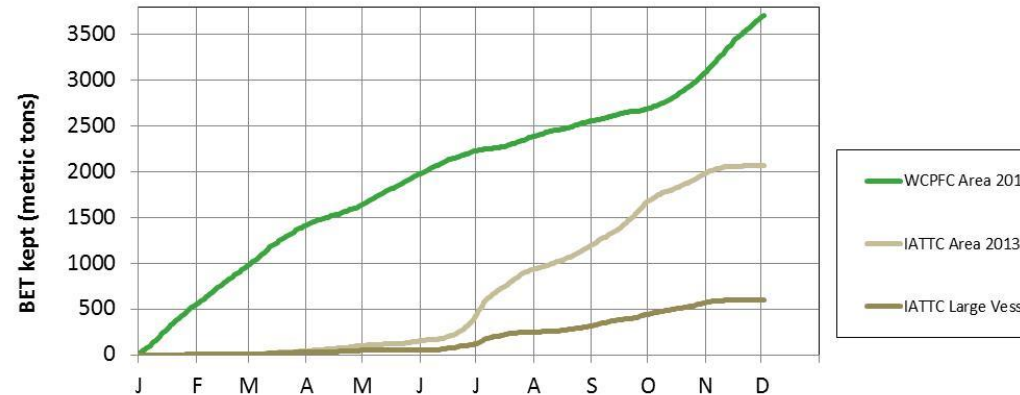
## Fisheries Monitoring Branch

Insular Fisheries  
Monitoring Program  
Kimberly Lowe, 17 staff



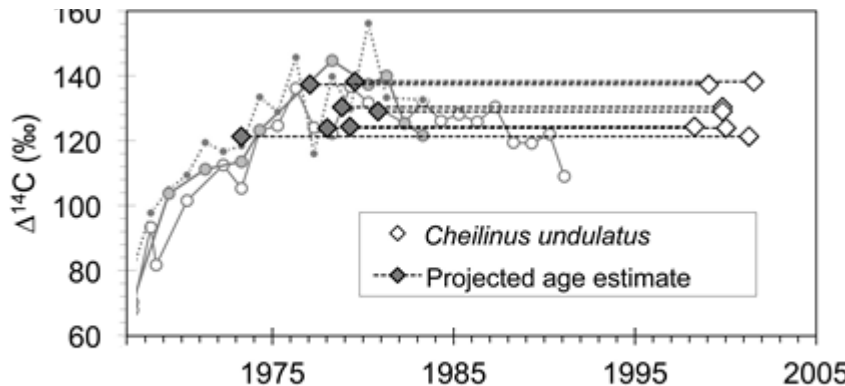
International Fisheries  
Program  
Keith Bigelow, 12 staff

Figure 3a. Cumulative US longline BET catch (kept) in the WCPFC Area and in the IATTC Area through the date in 2013 for which data are reasonably complete



## Fisheries Biology and Stock Assessment Branch

Life History  
Program  
Robert  
Humphreys,  
7 staff



Stock  
Assessment  
Program  
Gerard  
DiNardo, 13 staff